



The Socialization Potential of Carbon Markets: Insights from China and the EU

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Introduction

- **Introduction**
- **Concepts: Norms and socialization**
- **The socialization potential of carbon markets: Initial evidence**
- **The socialization potential of carbon markets: Future research**
- **Conclusion & questions for debate**

Concepts: norms and socialization

- Climate change as a “*super wicked problem*” (e.g. Lazarus 2010; and Rittel and Webber 1973, introducing the term ‘wicked problems’)
- “Standard approaches”, based on black-boxing interests, beliefs and identities, do not suffice (Bodansky, D. 2010. *The art and craft of international environmental law*)
- Elaborates on our “dominant approaches” (Young et al. 2015): need to explore and explain the potential for norm changes within existing system
- Theoretical background: social constructivism, sociological institutionalism (Wendt 1992; 1999).

Concepts: norms and socialization

- What is socialization?
 - "a process by which states internalize norms originating elsewhere in the international system" (Alderson 2001: 417)
 - Norms: "standards of appropriate behavior for actors with a given identity" (Finnemore and Sikkink 1998: 891)
 - Social constructivism
 - <-> rational choice:
 - utility maximization,
 - cost-benefit calculations



Concepts: norms and socialization

- Norms and social structures are essential to understand the nature and dynamics of (International) Politics (Wendt 1999)
- Relevance for climate change and environmental governance processes: climate change <-> other issues (e.g. ozone depletion, local water pollution)
 - Technological problem
 - Economic problem
 - Political problem
 - Moral problem (see e.g. D. Jamieson 2007)
 - → SIMULTANEOUSLY!
- Surprisingly few studies so far have looked into the causes of norm internalization processes (socialization) in the arena of climate change
- **This research aims to fill that gap by looking at the potential socialization effects of carbon markets**

Initial evidence: The CDM

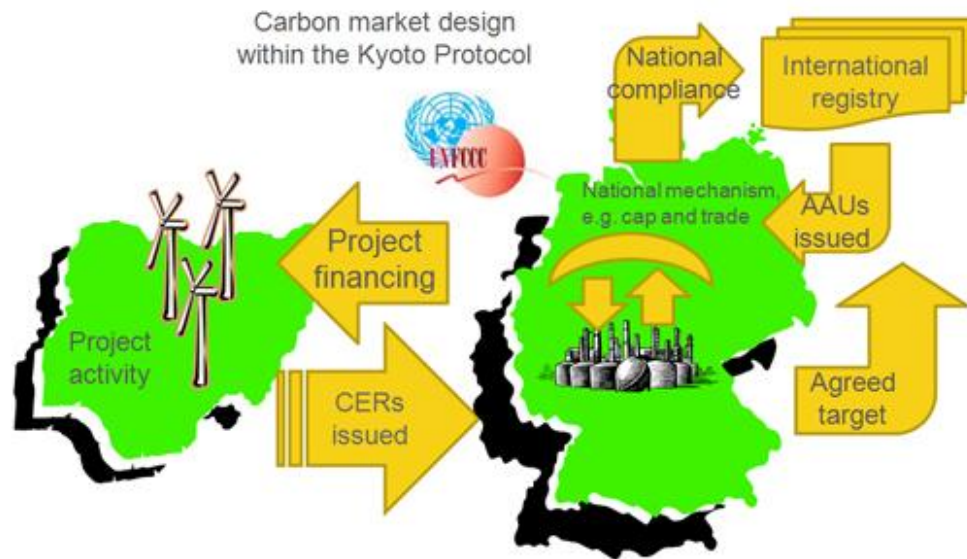
- 1. What is the CDM?
 - A mechanism that “allows the development of emission reduction projects in developing countries which result in emission credits, Certified Emission Reductions or CERs” (UNFCCC 2014). CERs are sold to developed countries to comply with their emission targets (including to companies under the EU Emissions Trading System, EU ETS)



Huitengxile Windfarm Project
(China's first registered CDM
project, 2005)
Source: BBC 2009.

- 1. What is the CDM?
 - The CDM has created a global market for emission credits, with money flowing from developed (including EU) to developing countries (including China).
 - IPCC concludes that:

"the flexibility mechanisms under the Kyoto Protocol have generally helped to improve its economic performance, but their environmental effectiveness is less clear. (medium evidence, medium agreement)" (IPCC 2014).



Source: Hone 2014.

- 2. The CDM and socialization
 - CDM's material incentives have the potential to trigger a socialization process
 - Role of norm entrepreneurs (Finnemore and Sikkink 1998; Nadelmann 1990) ... and legal institutionalization (Bernstein 2001; Koh 1997)
 - "because of various cognitive and institutional lock-in effects" material incentives might, over time, lead to changes in preferences, interests and even identities that go beyond purely behavioral, cost-benefit calculations (Checkel 2005: 808-809)
 - **Central hypothesis: CDM's material incentives, provided by the EU, have discernibly contributed to the internalization of economic development-oriented climate change norms in China.**

Table 1. Temporal sequence of the material incentives-induced socialization process

<i>Phase 1: Initiation</i>	<i>Phase 2: Improvement</i>	<i>Phase 3: Consolidation</i>	<i>Phase 4: Habit Formation</i>
<ul style="list-style-type: none">• Initial activities by norm entrepreneurs• Initial regulatory framework	<ul style="list-style-type: none">• Continued support by norm entrepreneurs and/or bureaucrats• Improved regulatory framework• First successful influx of material benefits	<ul style="list-style-type: none">• Continued support by norm entrepreneurs and/or bureaucrats• Instrument firmly in place• National roll-out• (Human) capacity, institution building, awareness raising• High volumes of delivered material benefits	<ul style="list-style-type: none">• Continued support by norm entrepreneurs and/or bureaucrats• Instrument used at full potential• Habit formation on macro-level• Domestic spillover and development of similar or related instruments and regulatory frameworks

Source: Author.

- Article on “The Socialization Potential of the CDM in EU-China Climate Relations”
David Belis and Bart Kerremans (accepted for publication), International Environmental Agreements: Politics, Law and Economics
 - Taking into account all available evidence and scrutinizing all rival explanations
 - concludes that there is at least a discernible socialization effect in China
 - with robust results in terms of capacity building and climate awareness raising at the national and local governmental levels and a series of unilateral climate mitigation measures that are highly suggestive of socialization,
 - particularly in view of the removal of the material incentives since the CER price crash in early 2013.
 - China continues to invest in the development of non-fossil fuel technology (inc. wind and solar) to reach its carbon intensity targets,
 - has set-up a pilot domestic emissions trading system that includes domestic offsetting (with "CCERs" or Chinese Certified Emissions Reductions),
 - China is going to peak GHG emissions by 2030 (US-China deal)

- A discernible effect:

Table 1. Summary of the CDM-induced Norm Internalization Process in China

Phase	1. Initiation	2. Improvement	3. Consolidation	4. Habit Formation
Conceptual prediction	Initial activities by norm entrepreneurs lead to the establishment of an initial regulatory structure	Regulatory framework is improved and existing shortcomings are amended	National roll-out, improvements in terms of (human) capacity, institution building and awareness raising	Formation of a habitual pattern on the macro-level and domestic spill-over
Observations in China	Completed: - 2004 Interim CDM Measures - Initial entrepreneurial activities	Completed: - <i>Strategic endorsement</i> by central and local governments - NCCP, REL - EU-China Partnership on Climate Change	Completed: - National roll-out (world leader), increase of capacity, awareness, goodwill - Entrepreneurial activities related to other mechanisms	Discernible effects: - Domestic ETS with CCERs. - Carbon trading as an accepted policy idea - Peak emissions considered
Time frame	2001-2005	2005-2007	2008-2010	2010-2012

Source: Authors.

- Role of norm entrepreneurs and bureaucrats
 - Role of international donors, notably the World Bank.
 - In the EU, Delbeke's team as active norm/policy entrepreneurs, both internally as well as, and increasingly, externally.
 - In China, strategic endorsement not only by the central but also by provincial and local governments , with important role for the NDRC and local DRCs.



Initial evidence: The EU ETS

- 1. What is the EU ETS?
 - The EU Emissions Trading System is the largest carbon market in the world.
 - Cap-and-trade system that covers over 11,000 energy-intensive installations across the EU. Currently in Phase III.
 - The EU's "flagship" climate policy
 - Covering about 50% of total EU emissions
 - Proposed cap by 2030: -43% compared to 1990.

Initial evidence: The EU ETS

- 2. Traces of socialization
 - Some scholarly work on the EU shows traces of socialization in the European power sector: a norm diffusion process seems to take place.
 - Skjaerseth and Eikeland observe the emergence of "a new industry behavioural pattern compatible with re-internalization of social norms on working together for a common good", Skjærseth, J.B., and Eikeland, P.O. (2013: p.17).
 - Interview data shows that: **"The embrace of emission reductions by EU industry is one of the EU ETS' greatest achievements so far."** (Author interview with P. Chauveau, head of climate policy, Solvay, 5 February 2015, Geneva.)

Future research: China & EU

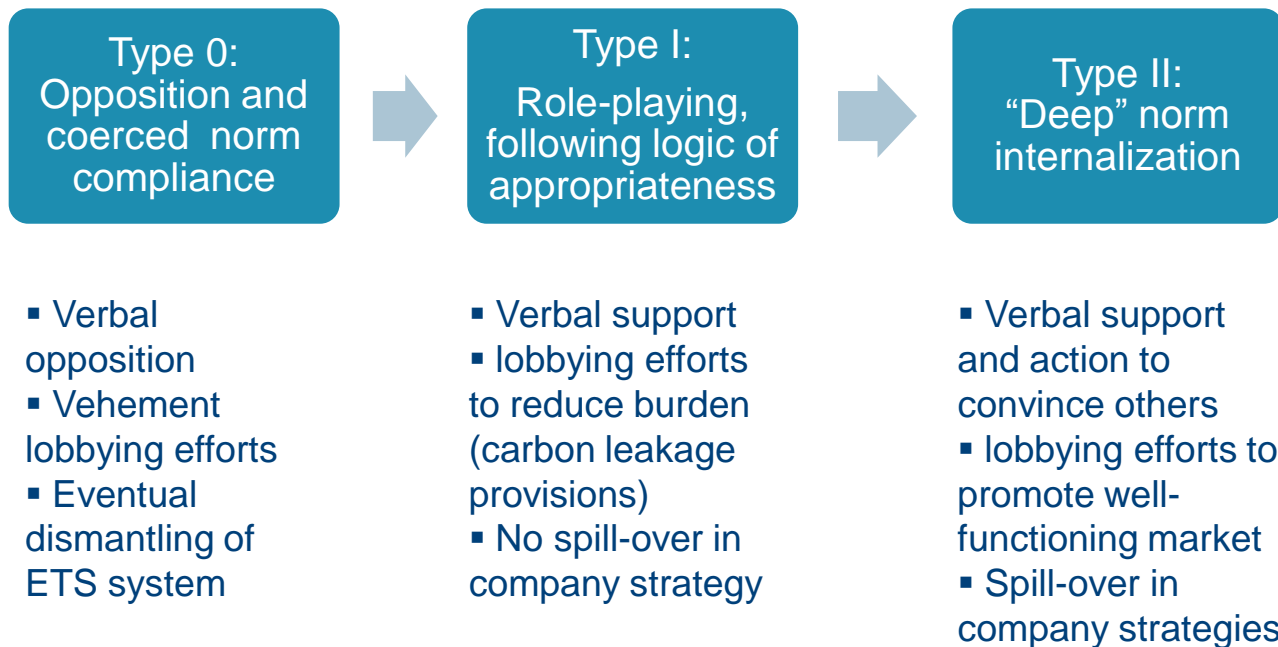
- 1. Post-doc research plan
- The objective of this post-doctoral research project is to initialize a fine-grained comparative case study analysis of EU and Chinese companies engaged in emissions trading.
- The research questions are as follows. First, to what extent do the **material incentives** posed by the development of respectively the EU's and China's Emissions Trading System result in the **internalization of climate change norms** in the participating energy-intensive industries?
- Material incentives, in this context, refer to material (financial or other) benefits that are put in place to incentivize certain types of behaviour and change the underlying normative convictions of actors.
- Why and how do these **processes differ** in China & EU
 - (a) the design features of both ETS systems and
 - (b) the political and institutional environment in which the design and implementation takes place (democratic multi-level vs. centralized communist party-led systems)?

Future research: China & EU

- 2. Different degrees of socialization
- Checkel (2005: 801-826) differentiates between Type I and Type II socialization,
- Type II: Actors internalize the norm "as the right thing to do" (logic of appropriateness, March and Olson 1998)
- Type I: Actors behave appropriately by learning a role. Role-playing is less "deep", but actors have nonetheless adopted a logic of appropriateness (as opposed to a rationalist logic of consequence), and the norm may become part of their "utility function").
- Type 0: Opposition to the norm / coerced norm compliance
- (see also Wendt's (1999) three types of norm internalization)

Future research: China & EU

- 3. Behavioral effects: What can be expected?
- Question for debate: Plausible research question? What can be expected?



Conclusion

- Questions
 - Plausible research questions?
 - Expected results? Probable **prominence of Type I socialization** (role-playing)
 - How to measure / track information in companies?
 - → How does this research relate to our 3 environmental governance processes? (Young et al. 2015)

Thank you!

